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EXAMINER	
FRAZIER, BARBARA S	
ART UNIT	**PAPER NUMBER**
1611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,949	GRIZZO ET AL.	
	Examiner	Art Unit	
	BARBARA FRAZIER	1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 8-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/6/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1-5 and 8-10 are pending in this application. Cancellation of claims 6 and 7 and addition of new claims 8-10 is acknowledged.

2. Claims 1-5 and 8-10 are examined.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. The rejections of claims 1-5 under 35 U.S.C. 103(a) as being unpatentable over Wilhelm et al (US Patent 5,167,708) in view of Rasmussen (US Patent 4,572,739) (claims 1, 3, and 4), and further in view of Wallar et al (US Patent 6,410,470) (claim 2) and Bernhard (US Patent 4,456,486) (claim 5) are withdrawn in view of Applicant's amendment to claim 1.

5. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilhelm et al (US Patent 5,167,708) in view of Anderson (US Patent 4,411,717) and/or Seeger et al (US Patent 6,335,390), and as evidenced by Rasmussen (US Patent 4,572,739).

Claim 1 of the claimed invention, as amended, is drawn to a process for preparing a cosmetic pigmentary composition comprising bringing into contact hydrated

chromium oxide-based particles with a chromium (VI) content between 20 and 1000 ppm of the total mass of said particles, and an iron (II) compound, to prepare a cosmetic pigmentary composition comprising particles with a chromium oxide base, in which the chromium present as chromium (VI) represent at most 5 ppm of the total mass of the particles.

Wilhelm et al teach that it is known to reduce chromium(VI) from a chromium oxide pigment suspension with $FeSO_4$ (i.e., iron(II) sulfate). The original concentration of chromium (VI) is 200 ppm (see Example 2).

Wilhelm et al do not specifically state that the pigment reduced with iron(II) sulfate is "chromate-free", or at most 5 ppm of the total mass of the chromium oxide particles. However, Wilhelm et al do state that Cr(VI) must be reduced and removed (col. 1, lines 40-45), and after the reduced chromium is precipitated and separated off, the wash water may be discharged as effluent (col. 2, lines 48-52). Therefore, one skilled in the art would recognize that the resultant chromium oxide pigment would be free of Cr(VI). Further, one skilled in the art would recognize that "chromate-free" would mean less than 5 ppm. As evidence, Rasmussen teaches that, when chromate(VI) is reduced with ferrous sulphate, no measurable content of water-soluble chromate means that the content of free chromate is less than 0.1 ppm Cr (col. 9, lines 11-14).

Wilhelm et al teach separating the chromium oxide from the original concentration of Cr(VI) in a filter press prior to reduction with $FeSO_4$, instead of contacting the chromium oxide-based particles with a chromium (VI) content of 200 ppm with $FeSO_4$.

However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to contact the chromium oxide-based particles with a chromium (VI) content of 200 ppm with $FeSO_4$; thus arriving at the claimed invention. One skilled in the art would be motivated to do so because the reaction of interest is the reduction of Cr(VI) to Cr^{3+}, as evidenced by Applicant's specification (see pages 1 and 2 of Applicant's specification). This is the reaction taught by Wilhelm et al, and one skilled in the art would recognize that said reaction would take place whether or not the chromium oxide particles are present, absent evidence to the contrary. Therefore, the presence of chromium oxide particles during the reduction of Cr(VI) to Cr^{3+} does not impart patentability to the claim but merely represents optimization of process steps and would be well within the purview of the skilled artisan, absent evidence to the contrary.

Wilhelm et al do not specifically state that the pigmentary composition of chromium oxide formed is a cosmetic composition. However, Wilhelm et al do teach that chromium oxide pigments are green pigments that are used in the fields of plastics, lacquers and refractory materials (see col. 1, lines 26-31).

Anderson teaches that the green pigment chromium oxide is a commercially available pigment widely used in both cosmetics and lacquers (see col. 2, lines 12-18). Additionally or alternatively, Seeger et al teach that metallic pigments comprising chromium(III) oxide are used in numerous segments of industry, including plastics pigmentation and cosmetics (see col. 1, lines 24-34).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to prepare a cosmetic pigmentary composition according to the

process of Wilhelm et al; thus arriving at the claimed invention. One skilled in the art would have been motivated to do so, with a reasonable expectation of success, because green chromium oxide pigments are known to be useful in cosmetics as well as plastics and lacquers, as taught by Anderson and Seeger et al, and therefore one skilled in the art would reasonably expect that a process for preparing a pigmentary composition for use in plastics and lacquers would also be suitable as a process for preparing a cosmetic pigmentary composition.

Regarding claim 3, Wilhelm et al. is silent with respect to the ratio of the iron (II) used to the chromium (VI) initially found in the chromium oxide particles.

However, Examiner notes that the ratio taught in claim 3 is merely an excess of reducing agent (i.e., iron(II) sulfate) used with respect to the agent to be reduced (i.e., chromium(VI)).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use an excess of iron(II) with respect to the amount of chromium(VI) present within the range taught by Applicants, and would be able to select optimal amounts of excess iron(II) within as a matter of routine experimentation. One skilled in the art of chemistry would have been motivated to use such an amount because doing so would result in the driving the reduction of chromium (VI) to Cr^{3+} to completion and provide the result of complete removal of the hazardous material chromium (VI). Therefore, absent unexpected results, the limitation of quantifying the excess amount of iron(II) reducing agent used does not impart patentability to the claim.

Regarding claim 4, Wilhelm et al. teach that it is known to use iron(II) sulfate as a reducing agent for chromium(VI) (see Example 2).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilhelm et al (US Patent 5,167,708) in view of Anderson (US Patent 4,411,717) and/or Seeger et al (US Patent 6,335,390), and as evidenced by Rasmussen (US Patent 4,572,739) as applied to claims 1, 3, and 4 above, and further in view of Wallar et al (US Patent 6,410,470).

The claimed invention and the invention of the combined references are delineated above (see paragraph 5).

Regarding claim 2, the invention of the combined references is silent with respect to the particle size of the chromium oxide pigment particles.

Wallar et al teach that the typical size of fine pigment-grade chromium oxide prior to removal of chromium metal impurities is a particle size of about 3 microns (col. 2, lines 1-10).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use chromium oxide particles having a particle size of about 3 microns in the process of Wilhelm et al., thus arriving at the claimed invention. One skilled in the art would have been motivated to do so because the size taught by Wallar et al. is the typical size for pigment-grade chromium oxide, and therefore would be the size of choice for chromium oxide pigment.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilhelm et al (US Patent 5,167,708) in view of Anderson (US Patent 4,411,717) and/or Seeger et al (US Patent 6,335,390), and as evidenced by Rasmussen (US Patent 4,572,739) as applied to claims 1, 3, and 4 above, and further in view of Bernhard (US Patent 4,456,486).

The claimed invention and the invention of the combined references are delineated above (see paragraph 5).

Regarding claim 5, the invention of the combined references is silent with respect to the pH of the process.

Bernhard teaches that, when chromium(VI) salts are reduced to chromium(III) in a pigment suspension, the pH value in the pigment suspension is preferably between 4.5 and 9 (col. 3, lines 44-54).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to perform the process of Wilhelm et al. at the pH taught by Bernhard, thus arriving at the claimed invention. One skilled in the art would have been motivated to do so because the pH range taught by Bernhard is described as the preferred range for the reduction of chromium(VI) with a reducing agent, and one skilled in the art would be able select an optimal pH within said range as a matter of routine experimentation. One would reasonably expect success from using the pH taught by Bernhard in the process of Wilhelm et al. because both processes are drawn to the reduction of chromium(VI) to chromium(III) with a reducing agent in a pigment suspension.

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilhelm et al (US Patent 5,167,708) in view of Anderson (US Patent 4,411,717) and/or Seeger et al (US Patent 6,335,390), and as evidenced by Rasmussen (US Patent 4,572,739) as applied to claims 1, 3, and 4 above, and further in view of DaCunha et al (US Patent 5,356,627) and/or Mellul et al (US Patent 5,496,544).

Claim 8 of the claimed invention is drawn to the process of claim 1, wherein the cosmetic pigmentary composition is used in at least one of a highlighter, a mascara, an eyeliner, or a foundation. Claim 9 of the claimed invention is drawn to a process for preparing a cosmetic comprising (a) preparing a pigmentary composition comprising particles (p) with a chromium oxide base, in which the chromium present as chromium (VI) represents at most 5 ppm of the total mass of the particles (p), by bringing into contact: (i) hydrated chromium oxide-based particles (p_0), with a chromium (VI) content between 20 and 1000 ppm of the total mass of said particles (p_0); and (ii) an iron (II) compound; and (b) preparing a cosmetic comprising the pigmentary composition. Claim 10 of the claimed invention is drawn to the process of claim 9, wherein the cosmetic comprises at least one of a highlighter, a mascara, an eyeliner, or a foundation.

The invention of the combined references is delineated above (see paragraph 5).

The invention of the combined references does not specifically teach the use of the cosmetic pigmentary composition in at least one of a highlighter, a mascara, an eyeliner, or a foundation, or preparing such a cosmetic comprising the cosmetic pigmentary composition.

DaCunha et al teach preparing a cosmetic composition which is a mascara comprising a colorant such as chromium oxide greens; the addition of the colorant imparts color to the eyelashes or eyebrows to which the composition is applied (col. 4, lines 11-22 and claim 11).

Mellul et al teach preparing a cosmetic composition which is a foundation (abstract) comprising a pigment such as chromium oxides (e.g., see col. 2, lines 40-43, and col. 5, lines 35 and 57-60). Said pigments are customarily used in such cosmetic compositions (col. 5, lines 18-21).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the cosmetic pigmentary composition of the combined references to prepare a cosmetic such as a mascara or foundation; thus arriving at the claimed invention. One skilled in the art would have been motivated to use the cosmetic pigmentary composition of the combined references for preparing a cosmetic such as a mascara and/or foundation, with a reasonable expectation of success, because the use of chromium oxide green in a mascara provides the benefit of imparting color to the eyelashes or eyebrows to which the composition is applied, as taught by DaCunha et al (col. 4, lines 11-22), and/or provides the benefit of imparting color which is customarily used in foundation compositions, as taught by Mellul et al (col. 5, lines 18-21).

Examiner's Remarks

On page 7, lines 8 and 9 of Applicant's response, Applicants state, "In view of the foregoing, and as agreed upon during the interview, independent claim 1 is allowable." However, it is pointed out that no agreement was reached with respect to the claims, as correctly noted on the Interview Summary mailed 1/15/09 (see Interview Summary form, dated 1/13/09).

Conclusion

No claims are allowed at this time.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Lakshmi S Channavajjala/
Primary Examiner, Art Unit 1611
April 11, 2009